#### PATENT COOPERATION TREATY

#### From the INTERNATIONAL BUREAU

### **PCT**

NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)

(PCT Rules 44bis.3(c) and 72.2)

To

IWATANI, Ryo ORIX Dojima Bldg. 3F 1-31, Dojima 2-chome Kita-ku, Osaka-shi Osaka 530-0003 JAPON



Date of mailing (day/month/year) 31 August 2006 (31.08.2006)	事務所
Applicant's or agent's file reference T10F1480	IMPORTANT NOTIFICATION
International application No. PCT/JP2005/000962	International filing date (day/month/year) 26 January 2005 (26.01.2005)
Applicant TAKASAGO I	INTERNATIONAL CORPORATION et al

1. Transmittal of the translation to the applicant.					
	<b>v</b>	The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).			
		The International Bureau transmits herewith a copy of the English translation of the international preliminary report on			

2. Transmittal of the copy of the translation to the designated or elected Offices.

patentability (Chapter II).

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

None

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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### PATENT COOPERATION TREATY

## **PCT**

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference T10F1480	FOR FURTHER ACTION	See item 4 below				
International application No. PCT/JP2005/000962	International filing date (day/month/year) 26 January 2005 (26.01.2005)	Priority date (day/month/year) 26 January 2004 (26.01.2004)				
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237						
Applicant TAKASAGO INTERNATIONAL CORPORATION						

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis. 1(a).						
2.	This REPORT consists of a total	of 7 sheets, including this cover sheet.					
	In the attached sheets, any refer to the international preliminary	ence to the written opinion of the International Searching Authority should be read as a reference report on patentability (Chapter I) instead.					
3.	This report contains indications	relating to the following items:					
	Box No. I	Basis of the report					
	Box No. II	Priority					
	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability						
	Box No. IV Lack of unity of invention						
	Box No. V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement						
	Box No. VI	Certain documents cited					
	Box No. VII	Certain defects in the international application					
	Box No. VIII	Certain observations on the international application					
4.		mmunicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but nakes an express request under Article 23(2), before the expiration of 30 months from the priority					

Date of issuance of this report 22 August 2006 (22.08.2006)

Masashi Honda

Authorized officer

e-mail: pt08@wipo.int

Facsimile No. +41 22 338 82 70 Form PCT/IB/373 (January 2004)

The International Bureau of WIPO 34, chemin des Colombettes

1211 Geneva 20, Switzerland

#### PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY				HTY	MANS			
To:						PCT PCT		
						RITTEN OPINION OF THE FIONAL SEARCHING AUTHORITY		
						(PCT Rule 43bis.1)		
			·		Date of mailing (day/month/year)			
Appli	cant's or	agent's file refere	nce		FOR FURTHER	ACTION		
	0F14	_			FORFORTIER	See paragraph 2 below		
		pplication No.		International filing date	(day/month/yaar)	Priority date (day/month/year)		
l	_	2005/000	962	26.01.2005	(univinounivear)	26.01.2004		
Intern	ational Pa	atent Classificatio	on (IPC) or both	national classification an	d IPC			
Applie	ant							
1		CO TNOTED	NEW TONE	T CODDODAMT	OM			
IA.	NASA	GO INTER	MALIONA	L CORPORATI	ON			
			·					
1.	This	opinion contains i	ndications relat	ing to the following items	3:			
	$\boxtimes$							
		Box No. I	Basis of the	opinion				
		Box No. II	Priority					
		Box No. III	Non-establis	hment of opinion with reg	gard to novelty, inven	tive step and industrial applicability		
		Box No. IV	Lack of unity	y of invention				
		Box No. V		ttement under Rule 43bis.; citations and explanation		novelty, inventive step or industrial tement		
		Box No. VI	Certain docu	ments cited				
	Ц	Box No. VII	Certain defec	cts in the international app	olication			
	$\boxtimes$	Box No. VIII	Certain obser	rvations on the internation	nal application			
2.	FUR1	THER ACTION						
	Internation than the	ational Prelimina his one to be the	ry Examining A IPEA and the c	Authority ("IPEA") except	that this does not ap	Il be considered to be a written opinion of the ply where the applicant chooses an Authority other reau under Rule 66.1bis(b) that written opinions of		
	writter	n reply together.	where appropr	considered to be a writter riate, with amendments, of 22 months from the pri	before the expiration	A, the applicant is invited to submit to the IPEA a of 3 months from the date of mailing of Form expires later.		
	For fu	rther options, see	Form PCT/ISA	J220.				
3.	For fu	rther details, see r	notes to Form P	CT/ISA/220.				
Name a	nd mailie	ng address of the	IS A/ID		Authorized officer			
. anc i	oo nkiill	ng address of the	ISMIF		Authorized officer			
Facsimi	ie No.				Telephone No			

International application No.
PCT/JP2005./000962

With regard to the language, this captions has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.    This opinion has been established on the basis of a translation from the original language into the following language   which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b))   Rule 12.3 and 23.1(b)    With regard to any nucleotide analor amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:   1	Box	No. I	Basis of this opinion
which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).  2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:  a. type of material  a sequence listing  table(s) related to the sequence listing  b. format of material  in written format  in computer readable form  c. time of filing/furnishing  contained in the international application as filed.  filed together with the international application in computer readable form.  furnished subsequently to this Authority for the purposes of search.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.	1.		
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:  a. type of material  a sequence listing  table(s) related to the sequence listing  b. format of material  in written format  in computer readable form  c. time of filing/furnishing  contained in the international application as filed.  filed together with the international application in computer readable form.  furnished subsequently to this Authority for the purposes of search.  3. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed, as appropriate, were furnished.			which is the language of a translation furnished for the purposes of international search (under
invention, this opinion has been established on the basis of:  a. type of material  a sequence listing  table(s) related to the sequence listing  b. format of material  in written format  in computer readable form  c. time of filing/furnishing  contained in the international application as filed.  filed together with the international application in computer readable form.  furnished subsequently to this Authority for the purposes of search.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.	İ		Rule 12.3 and 23.1(b)).
a sequence listing table(s) related to the sequence listing  b. format of material in written format in computer readable form  c. time of filing/furnishing contained in the international application as filed. filed together with the international application in computer readable form. furnished subsequently to this Authority for the purposes of search.  3. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.	2.		
b. format of material in written format in computer readable form  c. time of filing/furnishing contained in the international application as filed. filed together with the international application in computer readable form.  furnished subsequently to this Authority for the purposes of search.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.		a.	type of material
b. format of material  in written format  in computer readable form  c. time of filing/furnishing  contained in the international application as filed.  filed together with the international application in computer readable form.  furnished subsequently to this Authority for the purposes of search.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.			a sequence listing
in written format in computer readable form  c. time of filing/furnishing contained in the international application as filed. filed together with the international application in computer readable form. furnished subsequently to this Authority for the purposes of search.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.	ĺ		table(s) related to the sequence listing
in computer readable form  c. time of filing/furnishing  contained in the international application as filed.  filed together with the international application in computer readable form.  furnished subsequently to this Authority for the purposes of search.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.		ъ.	format of material
c. time of filing/furnishing  contained in the international application as filed.  filed together with the international application in computer readable form.  furnished subsequently to this Authority for the purposes of search.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.			in written format
contained in the international application as filed.  filed together with the international application in computer readable form.  furnished subsequently to this Authority for the purposes of search.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.			in computer readable form
filed together with the international application in computer readable form.  [In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.		c.	time of filing/furnishing
furnished subsequently to this Authority for the purposes of search.  3. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.			contained in the international application as filed.
3. In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.			filed together with the international application in computer readable form.
furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.			furnished subsequently to this Authority for the purposes of search.
4. Additional comments:	3.		furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as
	4.	Addit	ional comments:

International application No.

PCT/JP2005/000962

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability								
	stions whether the claimed invention le have not been examined in respect o	appears to be novel, to involve an inventive step (to be non obvious), or to be industrially f:						
	the entire international application							
	claims Nos. <u>8-14, 18-21</u>							
beca	use:							
	the said international application, or	the said claims Nos.						
	relate to the following subject matte	r which does not require an international preliminary examination (specify):						
	•							
		·						
i								
lп	the deteriotion plains or describes	indicate and a large day of the New York						
ب	are so unclear that no meaningful op	indicate particular elements below) or said claims Nosinion could be formed (specify):						
Ш	the claims, or said claims Nos.  by the description that no meaningful	are so inadequately supported						
$\boxtimes$		en established for said claims Nos. 8-14, 18-21						
	the nucleotide and/or amino acid seq Instructions in that:	uence listing does not comply with the standard provided for in Annex C of the Administrative						
	the written form	has not been furnished						
		does not comply with the standard						
	the computer readable form	D burnethan familed						
	the compater readable form	has not been furnished						
		does not comply with the standard						
		nd/or amino acid sequence listing. if in computer readable form only, do not comply with the Annex C-bis of the Administrative Instructions.						
	See Supplemental Box for further det	ails.						

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В	ox No. IV	Lack of unity of invention
1.	In:	response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:
ĺ		paid additional fees
		paid additional fees under protest
	$\boxtimes$	not paid additional fees
2.	Thi add	s Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay litional fees.
3.	This Aut	nority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
	cor	aplied with
	not	complied with for the following reasons:
		There is no technical feature common to the whole of claims 1-22.
	22	Since an optically-active binaphthol phosphate compound is publicly known (JP, 2000-6097, A, JP, 2002-249495, A), the technical feature "P-OH" common to claims 1-17 and 20-is not considered to be a special technical feature (technical feature indicating contributions the subject matters of claims 1-22 to the prior art as a whole).
	inv	Therefore, there is no technical relationship among the subject matters of claims 1-22 volving a special technical feature, and so the requirement of unity of invention is not satisfied.
4.	Consequer	utly, this opinion has been established in respect of the following parts of the international application:
	the p	arts relating to claims Nos. 1-7, 15-17

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Box No. VIII

Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

In which technical field the amines produced by the method described in claims 1-7 and 15-17 are concretely used is unknown from the description of the specification (in other words, the industrial applicability is unknown).

Consequently, the specification is not considered to satisfy the requirement of PCT Article 5 (the specialist of the technical field is unknown, and whether the specialist can be used is unknown), and claims 1-7 and 15-17 are not adequately (technically) supported by the specification.

We have not had to present our opinion about novelty, inventive step and industrial applicability, but since we could present our opinion about the novelty of a "method of producing amines described in the examples of the specification," we have done so.

Since we cannot presume the technical field of claim 1 and the specialist of that field, we will not present our opinion about the inventive step of claims 1-7 and 15-17.

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Box No.	V Reasoned statemen citations and explan					ty, inventive st	ep or industri	al applicab	ility;
i. Stat	tement		-	-			ž Ž		إملا:
1	Novelty (N)	Claims	17			000	*		YES
		Claims	1-7,	15, 1	6		S. Sala	<u>, , , , , , , , , , , , , , , , , , , </u>	NO
1	Inventive step (IS)	Claims						·	YES
		Claims							NO
] 1	Industrial applicability (IA)	Claims							YES
		Claims	1-7,	15-17					NO
I									

2. Citations and explanations:

Document 1: WO, 2003/093259, A1 (Aventis Pharma), 13 January, 2003 (13.01.03)

The subject matters of claims 1-7 and 15 do not appear to be novel in view of document 1 cited in the ISR. Document 1 describes a method of producing an amine (I) which reacts an imine (X) with a ketone compound (VI) in the presence of an optically-active Bronsted acid and also describes (R)-(-)-1, 1-binaphthalene-2, 2'-diylphophoric acid and (S)-(+)-1, 1-binaphthalene-2, 2'-diylphosphoric acid as said acid.